MCSP Mozambique Program Brief
Quality Improvement

Goal
The goal of the quality improvement (QI) component of the Maternal and Child Survival Program (MCSP) in Mozambique is to improve key reproductive, maternal, neonatal, and child health (RMNCH) outcomes by ensuring that services are safe, effective, timely, respectful, coordinated, and equitable. The program builds leadership and capacity of the Ministry of Health (MOH) for QI at the national level and in Nampula and Sofala provinces, which include 34 districts, 86 facilities,¹ and 758 communities.

Context
Mozambique has made significant progress reducing infant and child mortality in recent years. Between 2003 and 2011, infant mortality declined from 101/1,000 to 64/1,000, and under-five mortality declined from 152/1,000 to 97/1,000. Despite these improvements, the neonatal mortality rate remains high at 30/1,000 live births; 39% of all under-five child deaths occur in the newborn period. There has been more limited progress in maternal health. While the maternal mortality ratio (MMR) dropped from 692/100,000 to 408/100,000 live births between 1997 and 2003, no further decline in MMR was noted in 2011. A number of factors contribute to the high levels of maternal, neonatal, and child mortality, including underutilization of services and inconsistent implementation of high-impact interventions at facilities. Equity in access to services is also a concern, with national surveys showing disparities among provinces and between urban and rural areas.

¹ MCSP supports an additional 25 health facilities in Nampula for the nutrition intensive component, for a cumulative 111 facilities providing nutrition services with support from MCSP.
Program Approaches

MCSP aligns its QI approaches with the MOH’s national plans to accelerate the reduction of maternal, newborn, and child mortality (Health Sector Strategic Plan 2014–2019, the National Strategy for Quality and Humanization of Health Care 2017–2023, and the National Operational Plan to Accelerate the Reduction of Maternal, Neonatal, and Child Mortality). MCSP’s approaches to QI aim to: strengthen the governance of quality through strong country management and leadership structures; strengthen the quality of RMNCH service delivery through approaches that increase health worker motivation and QI, clinical, and management competencies; and engage the community to improve care through prioritization of the needs, values, and desires of beneficiaries. Further details on how these approaches are operationalized are provided below.

Strengthen the Country Planning, Management, and Leadership Structure

- **Increase leadership for QI strategy development:** MCSP seconded a Quality and Humanization Advisor to the MOH to provide ongoing technical assistance for development of national policies and strategies, including the National Strategy for Quality and Humanization of Health Care 2017–2023, which provides the framework for QI and respectful health care and guides the institutionalization of these interventions and practices in the national health system in Mozambique. MCSP also supported the development of the National Strategy for Combating Illegal Charges 2017–2023, which provides the roadmap to address this key issue affecting quality of care at health facilities in Mozambique.

- **Strengthen planning and coordination for QI:** MCSP advocated with the MOH for increased prioritization and leadership for QI, resulting in the MOH creating the Quality Assurance and Management Directorate in 2017. MCSP worked with the MOH and partners at the national level and at the provincial level in Nampula and Sofala to design and ensure the integration of QI activities in the annual Economic and Social Plan. In addition, MCSP helped the MOH plan and conduct a biennial national quality meeting to share progress, best practices, and lessons learned from implementation.

- **Implement the Reaching Every District/Reaching Every Community (RED/REC) approach to increase coverage of immunization, family planning, and nutrition services:** In coordination with the United Nations Children’s Fund (UNICEF), MCSP provided support in Nampula and Sofala provinces to train and mentor managers and health workers in RED/REC for improved coverage of immunization services. A key objective of the approach is to strengthen the reach and quality of RED/REC components by training managers and health workers in microplanning (planning and management of resources, outreach, community engagement, supportive supervision, and collection and use of data for planning and management) in seven priority districts and 14 health facilities. MCSP also provided logistical support to conduct mobile brigades in these districts. In addition to increasing immunization coverage, the approach is used to improve nutrition and family planning coverage by using mobile services.

Improve QI, Clinical, and Management Competencies to Strengthen Service Delivery

- **Standardize clinical practices within priority service delivery areas:** MCSP supported the development and revision of performance standards in seven technical areas (maternal, newborn, and child health [MNCH]; family planning; cervical cancer prevention and control; malaria; immunization; gender, and water, sanitation and hygiene [WASH]); and trained health facility staff and managers from 86 facilities in the Standards-Based Management and Recognition (SBM-R®) QI approach. Using this approach, MCSP conducted quarterly mentoring visits to help health workers measure performance against the standards, develop action plans to address identified weaknesses, and encouraged facility managers and district/provincial authorities to recognize health workers and facilities for their improvements as measured by the standards and key quality indicators. In the area of integrated management of childhood illness (IMCI), MCSP supported the MOH to accredit facilities that reached defined MOH criteria.
Conduct low-dose, high-frequency training and mentoring for improved clinical competencies: MCSP supported on-the-job training and mentoring in high-impact interventions for RMNCH, nutrition, immunization, malaria, gender, and WASH at 86 health facilities in Nampula and Sofala using a low-dose, high-frequency approach. This on-the-job approach not only reduces the amount of time health providers are absent from their facilities but also promotes maximal retention of clinical knowledge, skills, and attitudes through short, targeted, simulation-based learning activities, which are spaced over time and reinforced with structured, ongoing practice sessions on the jobsite. Key competencies include: 1) antenatal care, including intermittent preventive treatment in pregnancy, iron and folic acid (IFA) supplementation, maternal anemia, and involving men in birth planning and complications readiness; 2) day of birth (clean birth practices) and immediate postpartum, including managing maternal and newborn complications (i.e., postpartum hemorrhage, pre-eclampsia/eclampsia, maternal sepsis, newborn asphyxia, prematurity, and sepsis), counseling and provision of immediate postpartum family planning, and assessing mothers and babies for danger signs during the immediate postpartum period; 3) postnatal care, including counseling on exclusive breastfeeding and postpartum family planning; 4) immunization and child health, including IMCI and Child At-Risk services; 5) malaria prevention and management in pregnant women and children under-five; and 6) nutrition, including vitamin A supplementation, growth monitoring and promotion, and treatment of acute malnutrition.

Improve measurement of health outcomes: MCSP provides technical support to health facilities and districts at regular review meetings to analyze and interpret data on key RMNCH outcomes and use the findings for informed and timely decision-making. As part of this process, MCSP trains health workers to use data visualization tools to display key RMNCH indicators, which facilitates data analysis and the ability of providers and managers to use data to improve health outcomes. MCSP mentors community health workers in the correct reporting and discussion of community data and encourages their involvement in facility-based data review meetings to share data and provide feedback. MCSP is also leading efforts alongside the MOH to integrate routine child health indicators into the national health information system to improve planning and monitoring of child health services quality.

Reinforce referral systems: MCSP is strengthening eight networks in Nampula province to increase referral and counter-referral rates for a key set of RMNCH services. MCSP supports coordination meetings with district, health facility, and community representatives to define strategies and operational procedures to improve the effectiveness of the referral network. MCSP also trained providers from 190 health facilities in referral reporting tools, including a database developed by the program in DHIS2, which will allow the MOH to eventually integrate the information into the national health information system. At the community level, MCSP mapped community emergency transportation options in 758 communities, trained and mentored Community Health Committees to develop 336 Village Community Banks that raise funds to maintain and fuel motorcycle ambulances, and trained and mentored 11,370 community health workers to identify danger signs and make referrals.

Engage the Community to Improve Care

Strengthen Community Health Committees to build collective action for improved RMNCH: To increase community participation and ownership in health outcomes, and to advance the sound application of national health guidelines on Community Health Committees, MCSP trained and mentored 758 pre-existing and new Community Health Committees. Capacity strengthening focused on: expanding committee membership to include those most affected by critical health issues; training on group roles, responsibilities, norms, leadership skills, resource mobilization, and management; and creating functional linkages with health facility staff. Using these skills, the Community Health Committees explored and prioritized their community MNCH issues, created community action plans, implemented strategies, and monitored outcomes.

2 Termos de Referencia para o Estabelecimento e Funcionamento dos Comites de Saude, May 2012.
• **Increase community engagement and feedback in the health services QI process**: MCSP built the capacity of 78 Co-Management and Humanization Committees by helping them restructure to align with nationally mandated roles and responsibilities, and by improving their organizational skills through mentorship. Co-Management and Humanization Committee members include health facility staff and community representatives who play a critical role in improving the quality of facility- and community-based health service delivery. Through a Partnership Defined Quality approach supported by the MOH, communities and health providers worked together to improve health quality through ongoing analysis, dialogue, planning, collective action, and monitoring. MCSP adapted and integrated the Health Service Quality Scorecard into the Partnership Defined Quality process to enhance regular monitoring and analysis of health services by communities and to strengthen social accountability mechanisms.

**Key Results**

In the area of maternal and newborn health (MNH), 87% of health facilities (75/86) improved their performance as measured by MNH standards by at least 50% compared to baseline. The improved performance on standards correlates with improved performance on high-impact MNH interventions.

Figure 1 demonstrates that 31% more women with pre-eclampsia/eclampsia were treated with magnesium sulfate (MgSO4) in 86 MCSP-supported facilities over the baseline in 2014 (49%) compared to the second quarter of 2018 (80%).

Figure 2 shows a steady increase in the percentage of pregnant women who received 90 IFA supplements at 111 program-supported health facilities, from 29% at baseline in 2014 to 67% in the second quarter of 2018.

Figure 3 demonstrates an uptake in the percentage of women delivering in 86 program-supported facilities who accepted a family planning method prior to discharge, from 5% in the first five months of implementation (May–September 2016) to 24% in the second quarter of 2018.
In child health, 63% of health facilities (60/79) improved their performance by at least 50% compared to baseline, and MCSP supported the MOH to accredit 12 facilities in IMCI. This improvement correlates with improvements in key child health indicators. Figure 4 shows an increase in the percentage of children aged 0–59 months with moderate or severe acute malnutrition (MAM/SAM) who were recuperated over the life of the program. The results for the period of October–December 2016 suffered from data quality issues, which were addressed with support from MCSP. Program-supported facilities thereafter demonstrated a 24% increase in the percentage of children who were recuperated from the first quarter of 2017 (49%) to the second quarter of 2018 (73%).

Over the course of implementation (May 2016–June 2018), MCSP supported 242 mobile brigades through improved microplanning and logistical support, contributing to a cumulative 241,149 children under 12 months receiving Penta3 (DPT/Hib/Hepatitis B third dose) in MCSP-supported areas. Figure 5 shows the number of vaccinated infants and the Penta 3 vaccine dropout rate at the 14 health facilities implementing the REC strategy in Nampula and Sofala before and after training in the microplanning process (eight and six health facilities, respectively). The Penta 3 vaccine dropout rate declined by 43% in Nampula and by 52% in Sofala.
Lessons Learned

• **Leadership:** It is important to orient and strengthen the capacity of leadership at provincial, district, and facility levels in the key management aspects of QI policies and strategies, and to delegate responsibility for supervision of QI interventions and reporting. This is particularly important when new officials are appointed to avoid breaks or delays in implementation. As managers have increasingly assumed responsibility for leading QI processes, their facilities and health providers have transitioned to conducting SBM-R internal measurements without the direct support of the program.

• **Infrastructure:** Since QI standards include measurements on the existence of adequate infrastructure and availability of essential materials, constraints in these areas—such as lack of space and privacy, and material shortages—affect adherence to performance standards and the quality of services in most technical areas. Some services, such as cervical cancer prevention and control, were clearly impacted by these shortages: over an 18-month period (January 2017–June 2018), the percentage of eligible women screened for cervical cancer who received immediate treatment with cryotherapy decreased from 80% to 43% due to broken equipment and lack of spare parts. It is important to ensure the availability of key materials by regularly updating procurement plans and coordinating with partners who may have funding to complement state-purchased materials.

• **Human resources:** General human resource shortages and frequent rotation of trained staff present continuous challenges to improving the quality of RMNCH services. Regular on-the-job training and mentoring can help to mitigate the impact of these human resource challenges, along with the use of checklists and job aids. However, training alone will not make up for gaps in personnel, which will continue to affect attainment of quality milestones. MCSP has also been able to improve efficiency of services using available human resources by helping facility managers to reorganize staffing configurations and adjust client flow in MNH and child health consultations.

• **Measurement:** Monthly review and display of key indicators at the facility and district levels enabled health workers to monitor their performance and decide how to improve RMNCH services at the local level. At the district level, data review meetings provided a forum to compare performance across facilities and create healthy competition to improve services.

• **Community engagement:** Involving community members in microplanning resulted in increased trust and collaboration and allowed the adaptation of this approach to other technical areas beyond immunization.

Recommendations

**Leverage and work within the system to sustain improvement:**

• Identify and support QI advocates at facility and district levels who motivate their supervisees and co-workers to make progress on quality indicators. Publically recognize champions, managers, and health workers for their progress and successes.

• Dedicate resources to support decentralization of QI efforts by training and mentoring provincial focal points in management and leadership skills for QI.

• To sustain capacity-building efforts, invest in developing additional district- and facility-level trainers to conduct low-dose, high-frequency onsite training and mentoring. To increase the sustainability of this approach, advocate with the MOH to retain these staff and to consider incorporating training and mentoring responsibilities into the job descriptions of the key staff.

• Strengthen linkages between communities and facilities through regular mentoring of Co-Management and Humanization Committees and support for more frequent supervision of community health workers by facility-based supervisors.
Make measurement a priority:

- Develop a standardized list of quality indicators for all technical areas to improve the Quality Assurance and Management Directorate’s measurement of quality efforts at the national level.
- Continue support for monthly, district-level data discussions to analyze key quality indicators and ensure that feedback is delivered to health facilities. Ensure that quarterly data meetings continue with community cadres at health facilities to recognize their contribution to creating demand for facility-based services and to share data that will improve program planning and monitoring.
- Establish a graded recognition system of health facilities and health workers based on achievement of quality standards and selected quality indicators to increase motivation.

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